

REMARKS

Claims 71-72 and 74 are amended. Claims 67-74 are pending in the application.

Claims 67-74 stand rejected under 35 U.S.C. § 112, first paragraph, as being non-enabled. The Examiner indicates that the specification does not reasonably provide enablement for a composition comprising $(\text{CH}_3)_x\text{Si}_3\text{N}_{4-x}$, where $0 < x \leq 4$, and does not enable a person skilled in the art to make the invention as claimed. Applicant disagrees and requests reconsideration.

Applicant notes that the Examiner indicates at page 2 of the present Action that “there is no teaching as to how these compositions are produced”. Directing attention to the applicant’s specification at page 8, line 20 through page 9, line 14, such clearly sets forth methodology for achieving the recited compositions. The specification at page 9, lines 15-23 additionally sets forth a specific example achieved by such methodology. Accordingly, the application fully enables formation of the recited compositions.

The Examiner further indicates at page 2 of the present Action that the lack of enablement rejection is based partially upon the Examiner’s contention that “ $(\text{CH}_3)_x\text{Si}_3\text{N}_{4-x}$, where $0 < x \leq 4$ is an ion having a positive charge of +1.4 to +8”. The Examiner further contends that “ $\text{Si}_3\text{N}_{4/3}$ is an ion having a +4 charge”. However, it is noted that the Examiner fails to provide any support for such contentions either in the form of cited references or any scientific basis. Accordingly, such contentions are entirely unfounded. If the present rejection is to be maintained based upon these grounds, applicant respectfully requests that the Examiner provide specific support of such contentions so that such can be addressed by applicant.

As set forth above, claims 67-74 are believed to be in full compliance with 35 U.S.C. § 112, first paragraph. Accordingly, applicant respectfully requests withdrawal of the § 112, first paragraph, rejection of such claims in the Examiner's next action.

Claims 71-74 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With respect to claims 71 and 74 the Examiner indicates that such are indefinite as reciting a concentration without indicating a remaining content. With respect to claims 72-74 the Examiner further indicates that such are indefinite as reciting a barrier layer without including a support. Without admission as to the propriety of the Examiner's rejections, claim 71 is amended to depend from claim 68 and therefore to recite a composition further comprising Si_3N_y . Claim 72 is amended to recite the semiconductor barrier layer over a semiconductor substrate. Claim 74 is amended to depend from claim 73 and to therefore recite a barrier layer further comprising Si_3N_y . Such amendments overcome the rejection as set forth by the Examiner and applicant therefore requests withdrawal of the § 112, second paragraph, rejection of claims 71-74 in the Examiner's next action.

Claims 67-74 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims issued in U.S. Patent No. 6,719,919. Claims 68-74 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims issued in U.S. Patent No. 6,828,683. Submitted herewith is applicant's terminal disclaimer obviating such rejections.

For the reasons discussed above, claims 67-74 are allowable. Accordingly, applicant respectfully requests formal allowance of such pending claims in the Examiner's next action.

With respect to applicant's previously submitted Information Disclosure Statements, the Examiner indicates that certain references which are non-initialed on the returned Forms 1449 have not been considered for failure to provide a legible copy of each listed publication. The Examiner further indicates that these references were not considered in the parent application which resulted in U.S. Patent No. 6,719,919. However, applicant notes that each and every item listed in applicant's forms 1449 which are presently crossed out by the Examiner were considered during prosecution of the grandparent application which resulted in U.S. Patent No. 6,828,683. Accordingly, the necessary copies have either been provided previously or the reference was cited by the examiner and the required copies are available in the corresponding grandparent application. Applicant submits herewith an additional Information Disclosure Statement (IDS) which includes a listing of each of the references previously crossed out by the Examiner. Applicant respectfully requests consideration of such references at this time.

The Examiner additionally indicates that reference AP listed on page 7 of the IDS submitted February 10, 2004 is a duplicate of the reference AO which is listed on page 5 of the same IDS. The Examiner is mistaken. Applicant notes that the reference AO initialed by the Examiner at page 5 of the IDS consists of pages 437-441 of Wolf et al., "Silicon Processing for the VLSI Era". The reference AP which is crossed out by the Examiner at sheet 7 of the IDS specifically indicates pages xxiii corresponding to two pages of prologue of Wolf et al., "Silicon Processing for the VLSI Era", vol. 1. Accordingly, the reference AP

of sheet 7 which has been crossed out by the Examiner is resubmitted in the enclosed Information Disclosure Statement and consideration of such reference is respectfully requested.

Respectfully submitted,

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